



## UNITED STATES PATENT AND TRADEMARK OFFICE



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/009,416	11/30/2001	David M. Hodgson	PT-1042 USN	1524
27701	904 7590 12/18/2002 NCYTE GENOMICS, INC.		EXAMINER	
3160 PORTER PALO ALTO,	RDRIVE		GOLDBERG, JEANINE ANNE	
TALO ALTO,	011 7 100 .		ART UNIT	PAPER NUMBER
			1634	1
			DATE MAILED: 12/18/2002	<u> </u>

Please find below and/or attached an Office communication concerning this application or proceeding.

Application No.  10/009,416  Examiner  Jeanine A Goldberg  The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply  A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply is specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).  Status  1) Responsive to communication(s) filed on 6/14/02.  2a) Responsive to communication is in condition for allowance except for formal matters, prosecution as to the merits is					
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/ <del></del>					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims					
4) Claim(s) 1-56 is/are pending in the application.					
4a) Of the above claim(s) is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.					
6)☐ Claim(s) is/are rejected.					
7) ☐ Claim(s) is/are objected to.					
8) Claim(s) 1-56 are subject to restriction and/or election requirement.					
Application Papers					
9)☐ The specification is objected to by the Examiner.					
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
11)☐ The proposed drawing correction filed on is: a)☐ approved b)☐ disapproved by the Examiner.					
If approved, corrected drawings are required in reply to this Office action.					
12) The oath or declaration is objected to by the Examiner.					
Priority under 35 U.S.C. §§ 119 and 120					
13)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).					
a) ☐ All b) ☐ Some * c) ☐ None of:					
1. Certified copies of the priority documents have been received.					
2. Certified copies of the priority documents have been received in Application No					
3. Copies of the certified copies of the priority documents have been received in this National Stage					
application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.					
14)⊠ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application	).				
a) ☐ The translation of the foreign language provisional application has been received. 15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.					
Attachment(s)					
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)					

Application/Control Number: 10/009,416

Art Unit: 1634

## **DETAILED ACTION**

## Election/Restrictions

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1-10, 12, 16-17, 22-28, 43-56 drawn to nucleic acids of SEQ ID NO: 1-14, a microarray, methods of detecting nucleic acids of SEQ ID NO: 1-14, cells, method of producing a polypeptide. This group is subject to further restriction.

Group II, claim(s) 12, 29-42, drawn to polypeptides. This group is subject to further restriction.

Group III, claim(s) 14, drawn to an antibody which binds to a disease detection and treatment molecule polypeptide. This group is subject to further restriction.

Group IV, claim(s) 11, drawn to a transgenic organism. This group is subject to further restriction.

Group V, claim(s) 15, drawn to a method of identifying a test compound which binds to a polypeptide. This group is subject to further restriction.

Group VI, claim(s) 18, 20, drawn to a method for screening a compound for effectiveness in altering expression of a target polynucleotide. This group is subject to further restriction.

Group VII, claim(s) 19, 21, drawn to a method of toxicity testing of a compound. This group is subject to further restriction.

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- 2. The inventions listed as Groups I-VII do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons.
- 3. According to PCT Rule 13.2, unity of invention exists only when there is a shared same or corresponding special technical feature among the claimed inventions. Each group has a different special technical feature not shared by the remaining groups.

The inventions are distinct, each from the other because of the following reasons: The inventions of Groups I, II, III, and IV are patentably distinct because they are drawn to different products having different structures and functions. The nucleic acid of Group I is composed of nucleotides linked in phospodiester bonds and arranged in space as a double helix. The polypeptide of Group II is composed of amino acids linked in peptide bonds and arranged spatially in a number of different tertiary structures including alpha helices, beta-pleated sheets, and hydrophobic loops (transmembrane domain). The antibody of Group III is also composed of amino acids linked in peptide bonds and arranged spatially in a very specific tertiary structure that allows that antibody to specifically bind to particular regions, i.e. epitopes, of the encoded polypeptide. Further, antibodies are glycosylated and their tertiary structure is unique, where four subunits (2 light chains and 2 heavy chains) associated via disulfide bonds into a Y-shaped symmetric dimer. The transgenic animal of Group IV is a composition made up of structurally and functionally complex biological systems. Furthermore, the products of Groups I, II, III, and IV can be used in materially different processes, for

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example, the DNA of Group I can be used in hybridization assays, the antibody of Group III can be used in immunoassay, the polypeptide of Group II can be used to make fusion protein with an enzymatic function, while transgenic animals can be used to express different proteins other than the polypeptides encoded by SEQ ID NO: 1-14 Consequently, the reagents, reaction conditions, and reaction parameters required to make or use each invention are different. Therefore, the inventions of Groups I, II, III, and IV are patentably distinct from each other.

The inventions of Group V, VI and VII are patentably distinct methods because they each have different objectives, different uses, different reagents and different method steps. The method of Group V is for testing compounds which bind to polypeptides. Group VI is for method for screening a compound for effectiveness in altering expression of a target polynucleotide. Alternatively, the method of Group VII is for of toxicity testing of a compound. Therefore the methods are distinct over one another.

4. According to PCT Rule 13.2 and to the guideline in Section (f)(i)(B)(1) of Annex B of the PCT Administrative Instructions, all alternatives of a Markush Group must have a common structure. The chemical compounds of Group I, II, III and IV are not regarded as being of similar nature because all of the alternatives do not share a common structure.

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Each of the nucleotide, polypeptide, antibodies and transgenic organisms do not share a common structure. The polynucleotide sequences are all not the same.

Applicant's are therefore required to select a **single** sequence for examination.

- 5. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).
- 6. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).
- 7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner Jeanine Goldberg whose telephone number is (703) 306-5817. The examiner can normally be reached Monday-Friday from 8:00 a.m. to 5:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Jones, can be reached on (703) 308-1152. The fax number for this Group is (703) 305- 3014.

Any inquiry of a general nature should be directed to the Group receptionist whose telephone number is (703) 308-0196.

Jeanine Goldberg December 14, 2002

Supervisory Patent Examiner Technology Center 1600